



# **Water Infrastructure Security: EPA's Role and Progress**

**National Source Water Protection  
Conference**

**June 2, 2003**



## Overview of Presentation

- ◆ Implementing Public Health Security and Bioterrorism Response Act of 2002
- ◆ EPA's Homeland Security Strategic Plan
- ◆ Challenges



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## Public Health Security and Bioterrorism Preparedness and Response Act of 2002

- ◆ Amends SDWA
- ◆ Vulnerability Assessments
- ◆ Emergency Response Plans
- ◆ EPA responsibilities



President Bush, Tom Ridge, and Christine Todd Whitman tour the Kansas City Water Treatment Plant

Threat Document

Baseline information regarding kinds of attacks and probable threats

Key components of VA

Determination of level of threat

Types of Attacks

Guidance for systems serving less than 3,300 persons

Information Protection Protocol

Research

Methods to prevent, detect and respond to contamination.

Methods to prevent disruption of the water supply

Methods of providing alternative DW supplies

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## EPA's Homeland Security Strategic Plan

- ◆ Strategic Plan released in September 2002
- ◆ Four Mission - Critical Areas
  - Critical Infrastructure Protection
  - Preparedness, Response and Recovery
  - Communication and Information
  - Protection of EPA personnel and Infrastructure

EPA received \$90 million to support systems in this effort for current and future efforts.



## EPA's Homeland Security Strategic Plan -- Critical Infrastructure Protection

- ◆ **Goal 1 -- Enhance Security of Water and Wastewater Utilities**
- ◆ **Six tactics**
  - Tools, Training and Financial Assistance
  - Research and Technology Development
  - Build Security into Ongoing Practices
  - Information Exchange on Threats and Incidents
  - Coordination with Law Enforcement, Emergency Response, Medical and Lab Sectors
  - Coordination with Interdependent Infrastructures

*"Making the Most Systems Safest the Soonest"*



## Tools, Training and Financial Assistance

- ◆ Vulnerability Assessment Tools and Training
- ◆ Threat Document and Threat Level Guidance
- ◆ Large System Grants
- ◆ Small and Medium System Strategy
- ◆ Train-the-trainer for small systems (3,300-50K)
- ◆ Workshops/consultation services for medium systems (50K-100K)
- ◆ Emergency Response Guidance
- ◆ Security Enhancements Guide

- Threat document and treat level guidance (e.g., what systems might do at various threat levels).
- Small and medium system strategy (relies heavily on the states).
- Workshops (a process for awarding grants).
- Emergency response guidance –  
Association of State Drinking Water Administrators
- A consumers enhancement guide to help with security



## Research and Technology Development

- ◆ Research Action Plan
- ◆ Environmental Technology Verification Program
- ◆ High Priority Projects
  - Concentration/extraction
  - RiverSpill and Pipeline Net
- ◆ Assessment on Contaminants
  - Contaminant Database
- ◆ Assessment of Lab Capabilities

**Methods to prevent, detect and respond to contamination.**  
**Methods to prevent disruption of the water supply**  
**Methods of providing alternative DW supplies**



## Build Security into Ongoing Practices

- ◆ Operator Certification
- ◆ Training for States/Sanitary Survey
- ◆ Capacity Development/Asset Management/Environmental Management Systems





## Information Exchange

- ◆ Information Exchange on Threats and Incidents: Water Information Sharing and Analysis Center  
[www.waterisac.org](http://www.waterisac.org)
- ◆ Coordination with and training for emergency responders, public health officials, medical community, law enforcement
- ◆ Coordination with interdependent infrastructure

[www.waterisac.org](http://www.waterisac.org); a secure website with sensitive information open (but limited) to water systems, state administrators, etc.

Coordination with interdependent infrastructure (e.g., electrical and telecommunications). The Department of Homeland Security has a big role with this.



## Challenges

- ◆ Information sensitivity
- ◆ Actions to reduce risk—look for multiple benefits
  - Sound business practices—Incorporating Security into “Business as Usual”
  - System upgrades
  - Security upgrades
- ◆ Planning for emergencies—“Four P’s”
  - Partner
  - Protect
  - Plan
  - Practice



## For More Information

[www.epa.gov/safewater/security](http://www.epa.gov/safewater/security)

[www.epa.gov/nhsr](http://www.epa.gov/nhsr)

[www.epa.gov/nhsr](http://www.epa.gov/nhsr) (**National Homeland Security Resource Center**)